

CLAIM AMENDMENTS:

1. (Previously presented) A microparticle comprising:
 - a biodegradable polymer;
 - a detergent selected from a cationic detergent and an anionic detergent; and
 - an immunological adjuvant, wherein said immunological adjuvant is adsorbed on the surface of said microparticle.
2. (Previously presented) The microparticle of claim 1, further comprising an antigen derived from a pathogenic organism or a tumor, wherein said antigen is adsorbed on the surface of said microparticle, encapsulated within said microparticle, or both.
3. (Previously presented) The microparticle of claim 1, wherein the biodegradable polymer is selected from the group consisting of a poly(α -hydroxy acid), a polyhydroxy butyric acid, a polycaprolactone, a polyorthoester, a polyanhydride, and a polycyanoacrylate.
4. (Previously presented) The microparticle of claim 1, wherein the microparticle comprises a poly(α -hydroxy acid) selected from the group consisting of poly(L-lactide), poly(D,L-lactide) and poly(D,L-lactide-co-glycolide).
5. Cancelled.
6. (Previously presented) The microparticle of claim 1, wherein the microparticle comprises a cationic detergent.
7. (Previously presented) The microparticle of claim 1, wherein the microparticle comprises an anionic detergent.
8. (Previously presented) The microparticle of claim 2, wherein the antigen is an antigen comprising a polypeptide.

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9. (Previously presented) The microparticle of claim 2, wherein the antigen is an antigen comprising a polynucleotide.

10. Cancelled.

11. (Previously presented) The microparticle of claim 1, wherein the microparticle further comprises an immunological adjuvant encapsulated within the microparticle.

12. (Previously presented) The microparticle of claim 1, wherein the immunological adjuvant is selected from a CpG oligonucleotide, an E. coli heat-labile toxin, a monophosphorylipid A compound, and an aluminum salt.

13. (Previously presented) The microparticle of claim 2, wherein the microparticle comprises a cationic detergent.

14. (Previously presented) The microparticle of claim 2, wherein the microparticle comprises an anionic detergent.

15. Cancelled.

16. Cancelled.

17. (Previously presented) A method of producing a microparticle, said method comprising the steps of:

(a) providing an emulsion comprising (i) an organic solvent, (ii) a biodegradable polymer, (iii) water and (iv) a detergent selected from a cationic detergent and an anionic detergent, wherein the polymer is present at a concentration of about 1% to about 30% relative to the organic solvent, and wherein the detergent is present in the mixture at a weight to weight detergent to polymer ratio of from about 0.00001:1 to about 0.1:1;

(b) removing the organic solvent from the emulsion; and

(c) adsorbing an immunological adjuvant on the surface of said microparticle.

18. (Previously presented) The method of claim 17 wherein the detergent comprises an anionic detergent.

19. (Previously presented) The method of claim 17 wherein the detergent comprises a cationic detergent.

20. (Previously presented) The method of claim 17 wherein the detergent further comprises a nonionic detergent.

21. (Previously presented) The method of claim 17 wherein the detergent is present at a weight to weight detergent to polymer ratio of from about 0.0001:1 to about 0.1:1.

22. (Previously presented) The method of claim 17 wherein the detergent is present at a weight to weight detergent to polymer ratio of from about 0.001:1 to about 0.1:1.

23. (Previously presented) The method of claim 17 wherein the biodegradable polymer comprises a poly(α -hydroxy acid), a polyhydroxy butyric acid, a polycaprolactone, a polyorthoester, a polyanhydride, or a polycyanoacrylate.

24. (Previously presented) The method of claim 17, wherein the biodegradable polymer comprises a poly(α -hydroxy acid) selected from the group consisting of poly(L-lactide), poly(D,L-lactide) and poly(D,L-lactide-co-glycolide).

25. (Previously presented) The method of claim 17, wherein the biodegradable polymer comprises poly(lactide-co-glycolide).

26. (Previously presented) The method of claim 17, wherein the biodegradable polymer comprises poly(D,L-lactide-co-glycolide) and is present at a concentration of about 3% to about 10% relative to the organic solvent.

27. Cancelled.

28. (Previously presented) The method of claim 17, wherein said emulsion is a water-in-oil-in-water emulsion. r, an antigen, and an adjuvant.
29. (Previously presented) The method of claim 17, further comprising providing an antigen derived from a pathogenic organism or a tumor, wherein said antigen is adsorbed on the surface of said microparticle, encapsulated within said microparticle, or both.
30. (Previously presented) The method of claim 29, wherein the antigen is adsorbed on the surface of said microparticle.
31. (Previously presented) The method of claim 29, wherein the antigen is an antigen comprising a polynucleotide.
32. (Previously presented) The method of claim 29, wherein the antigen is an antigen comprising a polypeptide.
33. (Previously presented) The method of claim 17, further comprising providing an immunological adjuvant within the microparticle.
34. (Previously presented) A microparticle made according to the method of any of claims 17-26 and 28-33.
35. (Original) A microparticle composition comprising a microparticle of claim 34 and a pharmaceutically acceptable excipient.
36. Cancelled.
37. Cancelled.
38. (Previously presented) A method of delivering a therapeutically effective amount of an immunological adjuvant to a vertebrate subject comprising the step of administering to the vertebrate subject a microparticle composition of claim 35.

39. Cancelled.

40. (Previously presented) Use of a microparticle composition claim 35 for treatment of a disease.

41. (Previously presented) Use of a microparticle composition claim 35 for a vaccine.

42. (Previously presented) Use of a microparticle composition of claim 35 for raising an immune response.

43-51. Cancelled.

52. (Previously presented) The microparticle of claim 6, wherein said immunological adjuvant comprises an immunostimulating nucleotide sequence.

53. (Previously presented) The microparticle of claim 52, wherein the immunological adjuvant comprises a CpG oligonucleotide.

54. (Previously presented) The microparticle of claim 13, wherein the antigen (a) is adsorbed on the surface of the microparticle and (b) comprises a polynucleotide.

55. (Previously presented) The microparticle of claim 14, wherein the antigen (a) is adsorbed on the surface of the microparticle and (b) comprises a polypeptide.

56. (Previously presented) The microparticle of claim 2, wherein said antigen is selected from HIV antigens, hepatitis B virus antigens, hepatitis C virus antigens, *Haemophilus influenza* type B antigens, meningitis B antigens, pertussis antigens, diphtheria antigens, tetanus antigens and influenza A virus antigens.

57. (Previously presented) The microparticle of claim 2, wherein the antigen comprises a plasmid DNA molecule.

58. (Previously presented) The microparticle of any of claims 1-4, 6-9, 11-14 and 52-57, wherein the microparticle has a diameter between 500 nanometers and 30 microns.

59. (Previously presented) The microparticle of any of claims 1, 2, 6-9, 11-14 and 52-57, wherein the microparticle comprises poly(lactide-co-glycolide).

60. (Previously presented) The microparticle of any of claims 3, 4, 8, 11, 12 and 56, wherein the microparticle comprises an anionic detergent.

61. (Previously presented) The microparticle of any of claims 3, 4, 9, 11, 12, 56 and 57, wherein the microparticle comprises a cationic detergent.

62. (Previously presented) A microparticle composition comprising a microparticle of any of claims 1-4, 6-9, 11-14 and 52-57, and a pharmaceutically acceptable excipient.

63. (Previously presented) The microparticle composition claim 62, wherein said microparticle composition is an injectable composition.

64. (Previously presented) A method of delivering a therapeutically effective amount of an immunological adjuvant to a vertebrate subject comprising the step of administering to the vertebrate subject a microparticle composition of claim 62.

65. (Previously presented) Use of a microparticle composition of claim 62 for treatment of a disease.

66. (Previously presented) Use of a microparticle composition of claim 62 for a vaccine.

67. (Previously presented) Use of a microparticle composition of claim 62 for raising an immune response.

68. (Previously presented) A microparticle composition comprising a microparticle of claim 58 and a pharmaceutically acceptable excipient.

69. (Previously presented) The microparticle composition claim 68, wherein said microparticle composition is an injectable composition.

70. (Previously presented) A method of delivering a therapeutically effective amount of an immunological adjuvant to a vertebrate subject comprising the step of administering to the vertebrate subject a microparticle composition of claim 68.

71. (Previously presented) Use of a microparticle composition of claim 68 for treatment of a disease.

72. (Previously presented) Use of a microparticle composition of claim 68 for a vaccine.

73. (Previously presented) Use of a microparticle composition of claim 68 for raising an immune response.

74. (Previously presented) A microparticle composition comprising a microparticle of claim 59 and a pharmaceutically acceptable excipient.

75. (Previously presented) The microparticle composition claim 74, wherein said microparticle composition is an injectable composition.

76. (Previously presented) A method of delivering a therapeutically effective amount of an immunological adjuvant to a vertebrate subject comprising the step of administering to the vertebrate subject a microparticle composition of claim 74.

77. (Previously presented) Use of a microparticle composition of claim 74 for treatment of a disease.

78. (Previously presented) Use of a microparticle composition of claim 74 for a vaccine.

79. (Previously presented) Use of a microparticle composition of claim 74 for raising an immune response.

80. (Previously presented) A microparticle composition comprising a microparticle of claim 60 and a pharmaceutically acceptable excipient.

81. (Previously presented) The microparticle composition claim 80, wherein said microparticle composition is an injectable composition.

82. (Previously presented) A method of delivering a therapeutically effective amount of an immunological adjuvant to a vertebrate subject comprising the step of administering to the vertebrate subject a microparticle composition of claim 80.

83. (Previously presented) Use of a microparticle composition of claim 80 for treatment of a disease.

84. (Previously presented) Use of a microparticle composition of claim 80 for a vaccine.

85. (Previously presented) Use of a microparticle composition of claim 80 for raising an immune response.

86. (Previously presented) A microparticle composition comprising a microparticle of claim 61 and a pharmaceutically acceptable excipient.

87. (Previously presented) The microparticle composition claim 86, wherein said microparticle composition is an injectable composition.

88. (Previously presented) A method of delivering a therapeutically effective amount of an immunological adjuvant to a vertebrate subject comprising the step of administering to the vertebrate subject a microparticle composition of claim 86.

89. (Previously presented) Use of a microparticle composition of claim 86 for treatment of a disease.

90. (Previously presented) Use of a microparticle composition of claim 86 for a vaccine.

91. (Previously presented) Use of a microparticle composition of claim 86 for raising an immune response.

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